



State of California
Department of Food and Agriculture
Safe Animal Feed Education Program

*Any biological, chemical, physical, or radiological material that could be found in feed with the capability of causing illness, injury, or death in an animal that consumes it.**

Hazards Associated with Feed Production

Hazards associated with feed that have the capability of causing animal illness, injury, or death upon consumption are listed below. However, only some of these (highlighted in red) can affect humans that are consuming the animal derived products. The animal acts as a filter for human consumption which is why not all of the hazards associated with the animal are also considered for humans. We only look at the human hazards that will make it through the animal in the form of milk, eggs, or meat.

Biological:

- Viral, prion/prion and bacterial infectious diseases
 - Bovine Spongiform Encephalitis, Prohibited Mammalian Proteins
 - Salmonella
 - E.coli O157:H7
 - Avian Influenza/Newcastle Disease
 - Campylobacter
 - Clostridium Botulinum
 - Clostridium Perfringens
 - Staphylococcus Aureus
- Food borne contaminants
- Parasitic Agents

Chemical:

- Aflatoxin/Mycotoxins
- High Risk Minerals
 - Selenium
- Medication/ drug Residues
- Heavy Metals
 - Copper (sheep)
- Pesticide Residues
- Nitrates
- Toxic Weeds
 - Alkaloid
- Gossypol- Free



State of California
Department of Food and Agriculture
Safe Animal Feed Education Program

- Non-Protein Nitrogen (horses, rabbits, pigs)
- **Dioxins**
- Color Additives
- Lubrication/Cleaning/Sanitation Agents

Physical:

- Any foreign object/clips/twist-ties
- Glass
- Metal
- Stones
- Nuts/ bolts
- Wood
- Plastics

Radiological:

- Any exposure to radiologic material

Hazards capable of affecting humans

NOTE: Receiving ingredients from an approved supplier will limit the hazards that will be of a significant risk to the receiving facility. Because approved suppliers must operate under conditions limiting the opportunities for material to become adulterated, there are a number of hazards that will be deemed “No significant risk,” because the ingredients or material comes from an approved supplier.

**AAFCO Feed Industry HACCP Auditor Manual*